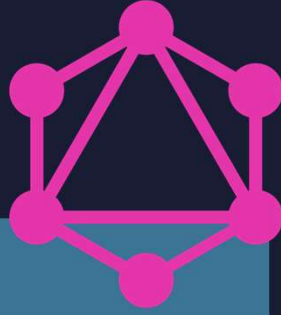
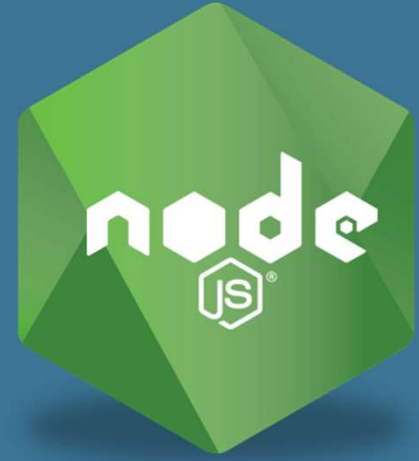


# తెలుగు లో

## PART – 10



Venkatesh Mogili  
#WebGuru



## Crash Course

- What is GraphQL?
- GraphQL vs REST API's
- GraphQL in NodeJS

# Contents

- What is GraphQL?
- GraphQL vs REST API's
- GraphQL in NodeJS?

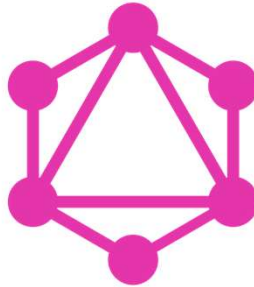


Venkatesh Mogili  
#WebGuru



# What is GraphQL?

- GraphQL is an open-source data query and manipulation language for APIs, and a runtime for fulfilling queries with existing data.
- It gives clients the power to ask for exactly what they need and nothing more.
- GraphQL was released in 2015.



Venkatesh Mogili  
#WebGuru



# GraphQL vs REST API's

Limitations of REST:

1. Multiple Round Trips To Fetch Related Resources:

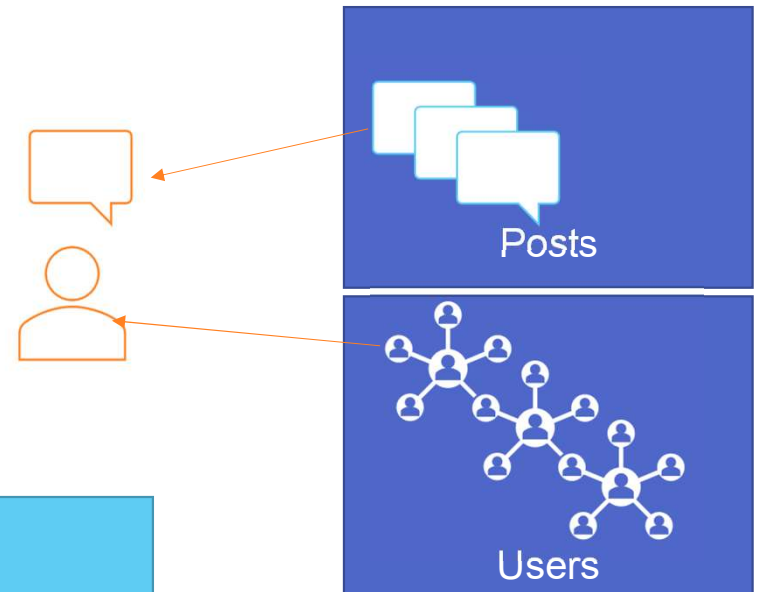
➤ Example:

➤ Imagine you'd like to request information from a post entity. At the same time you'd like to request information of post author (which is a different entity). Typically this is done by sending two request to the REST API (e.g. by using HTTP GET). First to retrieve the post object and second to retrieve the user object.

➤ <http://localhost:5000/posts/:id>

➤ <http://localhost:5000/users/:id>

Post id,  
Post title,  
Author of the post



Venkatesh Mogili  
#WebGuru

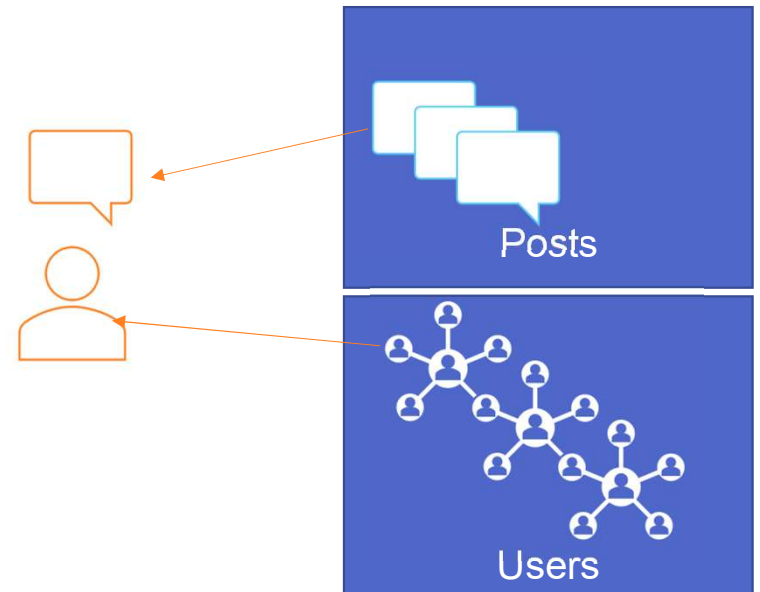


# GraphQL vs REST API's

Limitations of REST:

2. Over Fetching/Under Fetching:

- By using endpoint <http://localhost:5000/posts/:id> we are fetching data for a specific post. Each post might have the following properties: *id*, *title*, *userId*, and *body*. You'll always get back the complete set of data.
- There is no way to limit the response to only contain a subset of data like *title* and *userId*.



Venkatesh Mogili  
#WebGuru



# GraphQL vs REST API's

Limitations of REST:

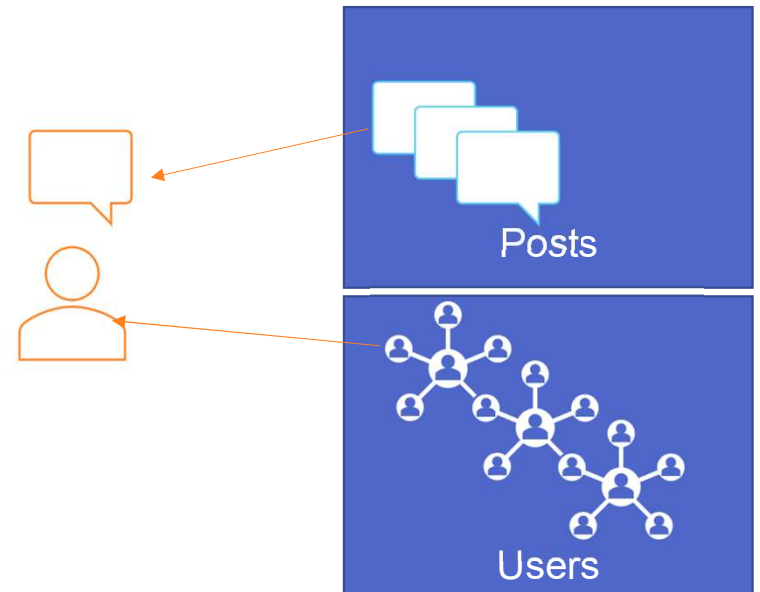
2. Over Fetching/Under Fetching:

➤ Let's call the below apis:

<https://jsonplaceholder.typicode.com/posts/1>

<https://jsonplaceholder.typicode.com/users/1>

➤ **Two server round trips are needed to retrieve the post and the corresponding author information from the REST endpoints.**



Venkatesh Mogili  
#WebGuru

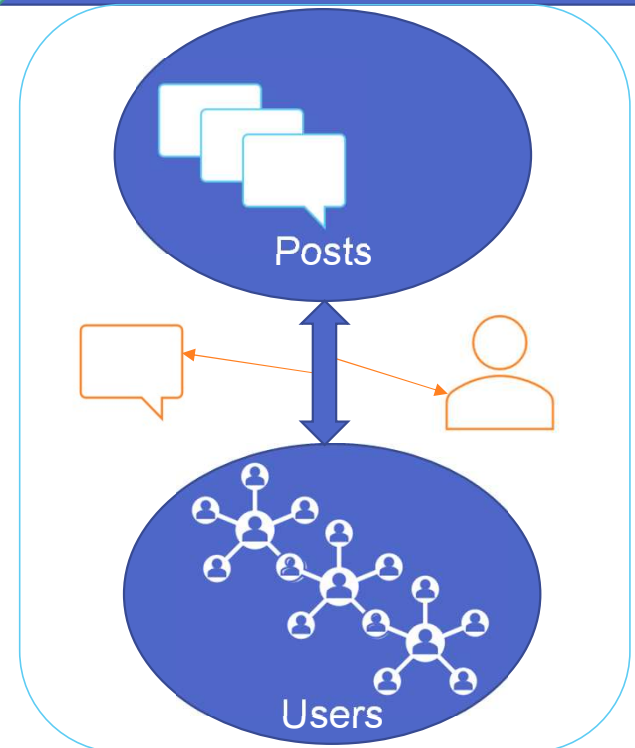


# GraphQL vs REST API's

## GraphQL Solution:

- ✓ Only one end point : /graphql (POST method only)
- ✓ The below query exactly fetches the post where id is 1 and respective user's name.

```
query {  
  post(id:1){  
    id  
    title  
    user {  
      name  
    }  
  }  
}
```



Venkatesh Mogili  
#WebGuru



# GraphQL in NodeJS

- We can do operations on any database like SQL, MongoDB, PostgreSQL, any server like NodeJS, Java, Python, Ruby and any technology for implementing and using GraphQL.
- Installation:
- `npm install graphql express-graphql`



Venkatesh Mogili  
#WebGuru





# Contents

- ✓ What is GraphQL?
- ✓ GraphQL vs REST API's
- ✓ GraphQL in NodeJS?



Venkatesh Mogili  
#WebGuru



✓ Don't forget to Subscribe to get latest updates 🔔



LIKE



SHARE



COMMENT



**Subscribe**  
**and**



**Stay Tuned**

**For more updates...**

**VENKATESH MOGILI**

#Web Guru



**THANK YOU FOR WATCHING**

#Stay Home Stay Safe

